

What are Newton's Laws of Motion?

1. **An object at rest remains at rest, and an object in motion remains in motion at constant speed and in a straight line unless acted on by an unbalanced force.**
2. **The acceleration of an object depends on the mass of the object and the amount of force applied.**
3. **Whenever one object exerts a force on another object, the second object exerts an equal and opposite on the first.**

Sir Isaac Newton worked in many areas of mathematics and physics. He developed the theories of gravitation in 1666 when he was only 23 years old. In 1686, he presented his three laws of motion in the "Principia Mathematica Philosophiae Naturalis."

By developing his three laws of motion, Newton revolutionized science. Newton's laws together with Kepler's Laws explained why planets move in elliptical orbits rather than in circles.

Below is a short movie featuring Orville and Wilbur Wright and a discussion about how Newton's Laws of Motion applied to the flight of their aircraft.